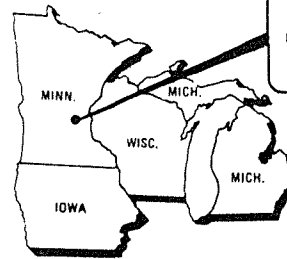


US DEPARTMENT OF AGRICULTURE
FOREST SERVICE



Northeastern Area
State & Private Forestry
DIVISION OF FOREST PEST CONTROL

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Rpt. No. S-71-2

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BIRCH SKELETONIZER DEFOLIATION ON THE
HAYWARD AND GLIDDEN RANGER DISTRICTS,
CHEQUAMEGON NATIONAL FOREST, WISCONSIN

By Glen Erickson

INTRODUCTION

Defoliation of birch spp. by the Birch Skeletonizer, Bucculatrix canadensisella L., was first observed in 1969. In 1970 defoliation was mapped during the jack-pine budworm survey in northern Wisconsin.

METHODS

The survey was flown August 20, 1970, in a Cessna 172 at 120 m.p.h. The flight lines were in a north-south direction; 1000 feet above the ground; in parallel lines 4 miles apart.

Defoliation was classed as moderate to heavy--obvious browning to complete foliage loss--as visible from the air. A ground survey was made to confirm the aerial observations.

RESULTS AND DISCUSSION

All birch in the mapped areas had moderate to heavy defoliation. Moderate defoliation predominated, heavy defoliation was confined to individual or small groups of trees.

Foliage browning is caused by leaf drying due to larval feeding between the leaf surfaces. Completely killed leaves drop to the ground. Partially killed leaves remain on the tree.

Excessive stand exposure and reduction of tree vigor are conducive to attack by the Bronze Birch borer, Agrilus anxius Gory.

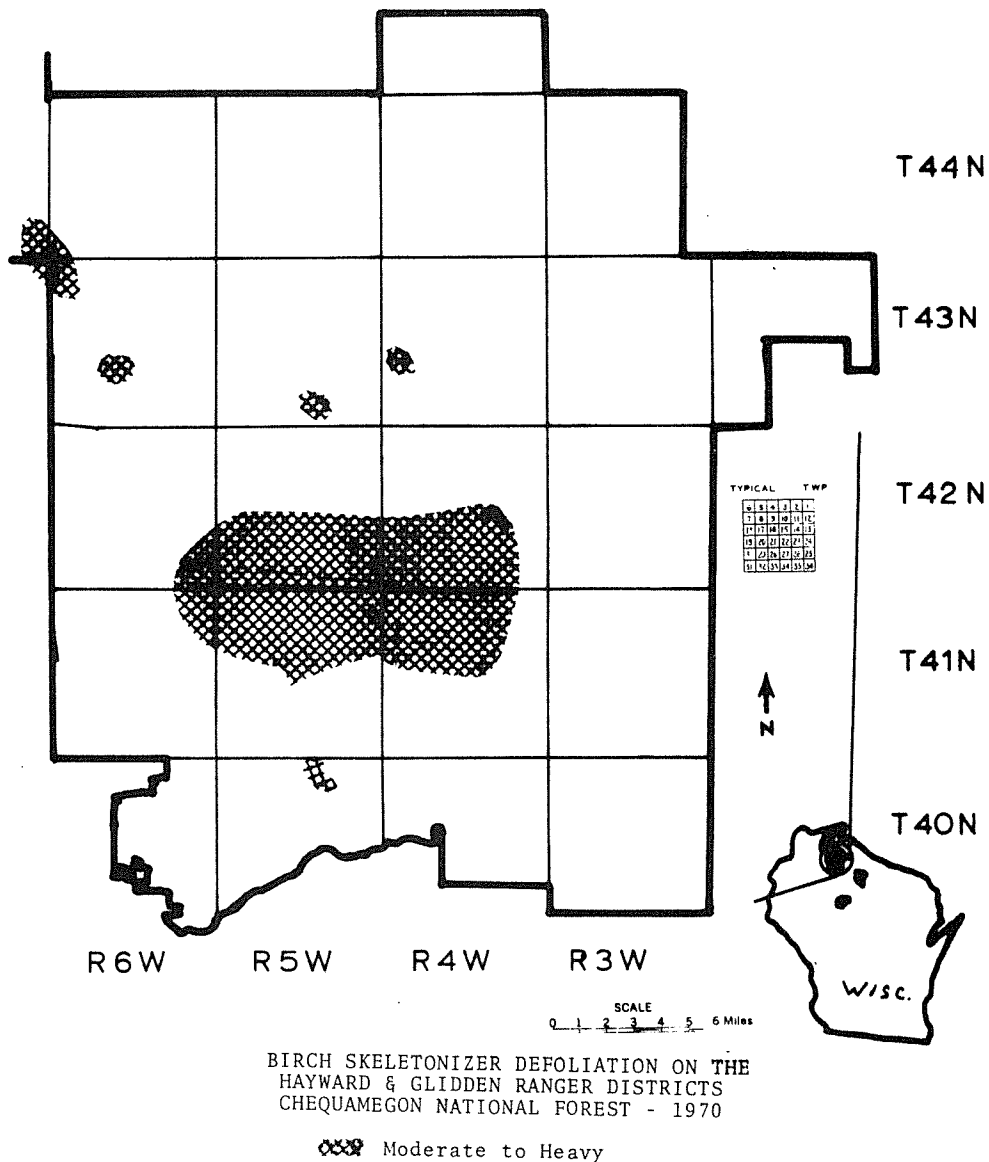


The combination of tree weakening by defoliation and successful borer attack causes tree mortality, MacAloney 1968¹.

Dead, deteriorating trees reduce aesthetic and scenic values in recreational areas, as well as posing a safety hazard to recreational area users.

RECOMMENDATIONS

The Land Manager should institute a surveillance survey in the affected areas for evidence of birch crown top mortality. Evidence of these conditions should be reported to this office on form NE 5200-1 (Forest Pest Report).



1. MacAloney, Harvey J. 1968. The Bronze Birch Borer Forest Pest Leaflet #111. 4pp. 5 references, illus.